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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/175,522	10/20/1998	PAUL STEPHAN BEDROSIAN	L0012/7001	7010

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EXAMINER

PHAN, HANH

ART UNIT PAPER NUMBER

2633

DATE MAILED: 01/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/175,522

Applicant(s)

BEDROSIAN, PAUL STEPHAN

Examiner

Hanh Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 11-13, 15 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the amendment filed on 04/28/2003.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Lemieux (US Patent No. 6,256,507).

Regarding claim 1, referring to figures 1, 2A-2C, 4 and 6, Lemieux discloses apparatus for providing synchronization signals to a telecommunications network comprising:

a central synchronization management unit (i.e., mobile switching center MSC 14, Fig. 1) for distributing synchronization signals, and

a synchronization distribution unit (i.e., base station 18, Fig. 1) connected to receive synchronization signals from the central synchronization management unit (i.e., mobile switching center MSC 14, Fig. 1) and to distribute the signals to at least one network element (i.e., mobile station 24, Fig. 1)(from col. 2, line 60 to col. 5, line 38).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemieux (US Patent No. 6,256,507) in view of Cheong et al (US Patent No. 6,477,154).

Regarding claim 2, Lemieux differs from claim 2 in that he fails to teach the synchronization signals are optical signals. Cheong teaches the synchronization signals are optical signals (Figs. 1 and 2, col. 4, lines 1-67 and col. 5, lines 1-59). Therefore, it would have been obvious to one having skill in the art at the time of the invention was made to incorporate the synchronization signals are optical signals as taught by Cheong in the system of Lemieux. One of ordinary skill in the art would have been motivated to do this since Cheong suggests in column 4, lines 1-67 and col. 5, lines 1-59 that using such synchronization signals are optical signals have advantage of allowing providing a high speed and high capacity communication system.

Regarding claim 3, the combination of Lemieux and Cheong teaches the central synchronization management unit comprises an input port for receiving a clock signal and an optical processor for producing optical clock signals (Figs. 1 and 2 of Cheong and Fig. 1 of Lemieux).

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6. Claims 4-10, 14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemieux (US Patent No. 6,256,507) in view of Cheong et al (US Patent No. 6,477,154) and further in view of Moulton et al (US Patent No. 6,487,262).

Regarding claims 4 and 16, the combination of Lemieux and Cheong differs from claims 4 and 16 in that it fails to teach the central synchronization management unit further comprises a processor for retiming clock signals received at the input port. However, Moulton teaches the central synchronization management unit further comprises a processor for retiming clock signals received at the input port (Figs. 1 and 2, col. 3, lines 35-67, col. 4, lines 1-67 and col. 5, lines 1-20). Therefore, it would have been obvious to one having skill in the art at the time of the invention was made to incorporate the processor for retiming clock signals received at the input port as taught by Moulton in the system of the combination of Lemieux and Cheong. One of ordinary skill in the art would have been motivated to do this since Moulton suggests in column 3, lines 35-67, col. 4, lines 1-67 and col. 5, lines 1-20 that using such a processor for retiming clock signals received at the input port has advantage of allowing retiming and reshaping the signal and to reduce the distortion of signal and reduce the signal errors.

Regarding claims 5 and 17, Lemieux further teaches the input port is equipped to receive clock signals from a plurality of clock sources (Fig. 1).

Regarding claim 6, Lemieux further teaches the central synchronization management unit selects one of a plurality of input clock signals as a primary clock output signal (Fig. 1, from col. 2, line 60 to col. 5, line 38).

Regarding claim 7, the combination of Lemieux, Cheong and Moulton teaches the central synchronization management unit produces a plurality of optical clock output signals (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Regarding claim 8, the combination of Lemieux, Cheong and Moulton teaches the synchronization distribution unit comprises a passive optical input port configured to receive an optical clock signal and to split the optical clock signal into two signals, routing one of the split signals to an optical output (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Regarding claim 9, the combination of Lemieux, Cheong and Moulton teaches the synchronization distribution unit comprises a active optical input port configured to receive an optical clock signal; and a clock recovery system configured to perform clock recovery on an optical clock signal received at either the active or passive optical input port (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Regarding claims 10 and 14, the combination of Lemieux, Cheong and Moulton teaches the clock recovery system is configured to receive optical clock signals from the active optical input port and from the passive optical input port and to perform clock recovery on an optical clock input from a selected one of the active and passive optical input ports (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Regarding claim 18, the combination of Lemieux, Cheong and Moulton teaches the central synchronization management unit produces two clock output signals from the selected one of the plurality of clock signals received by the central synchronization management unit and transmits one of the clock output signals over an optical link to an

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active input port of the synchronization distribution unit and transmits the other of the clock output signals over an optical link to a passive input port of the synchronization distribution unit (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Regarding claim 19, the combination of Lemieux, Cheong and Moulton teaches the step of selecting by an synchronization distribution unit of one of the passive and active optical input clock signals to transmit to a network element (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Regarding claim 20, the combination of Lemieux, Cheong and Moulton teaches the selected clock signal is converted from an optical to an electrical signal before transmission to the network element (Fig. 1 of Lemieux , Fig. 2 of Cheong and Fig. 2 of Moulton).

Allowable Subject Matter

7. Claims 11-13, 15 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1-21 are have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

A handwritten signature in cursive script, appearing to read 'Hanh Phan', is written over a horizontal line.

Hanh Phan

12/24/2003